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CONTINUATION OF REPORT ON HYSTERECTOMIES.

NINE MORE CASES OF HYSTERECTOMY PERFORMED BY THE NEW METHOD.

The last number of the JOURNAL OF ORIFICIAL SURGERY contained a description of a new and superior method of removing the uterus, or the uterus and appendages, if so desired.

There are several remarkable features about this new operation.

First, The loss of blood is a mere trifle, and as the blood vessels are not wounded, they remain to nourish and repair the wounded parts, which they do with great rapidity and completeness.

Second, The uterus need not be mutilated or even wounded, in the process, so that the entire organ comes out intact.

Third, If through accident a blood vessel should be wounded, it is so perfectly in the field of operation that it can be easily secured by artery forceps and tied by the operator without doing the slightest injury to any of the fibres of the plexus of nerves in its neighborhood.

Fourth, As no ligatures whatever except an occasional one applied directly to an artery are employed, there is no pinching of the sympathetic plexus of nerves which surrounds the uterine tissues, and consequently there is no shock induced by the operation.

Fifth, The ovaries and fallopian tubes can also be removed by keeping the dissection close to these structures without the loss of more than a few drops of blood, and the severed margins of the peritoneum can then be readily coapted by a continuous suture of catgut.

Sixth, The margins of the peritoneum can then be nicely coapted, so as to make a tight and satisfactory floor for the pelvis, thus preventing hernia, and also the leaking of the discharges from the wound back into the peritoneal cavity.

Seventh, The vaginal wound can be kept open by a tampon of silk, thus affording ample drainage from the wounded surface and preventing sepsis.

Eighth, As a result of this manner of procedure, the operation seems almost entirely devoid of shock or danger to the patient, and a major operation is converted into a minor one.

Ninth, Whereas, by the processes which involve the pinching of nerves in the effort to avoid hemorrhage, the records of the cases are not only as a rule quite fatal, but detrimental to the health and happi-

ness of the patients in case they do live, the removal of the uterus by the new method is in every way preferable to prevailing ones. There is scarcely any pain and very little soreness after the operation; the re-action and healing are rapid; the freshness and buoyancy of the patients are restored to them, and their natures, instead of being changed for the worse, seem to be radically improved in every particular by the work.

As the subject seems to have interested so many enquiring friends and as it promises so much for the relief of human suffering in certain classes of cases, and seems to be such a desirable substitute for all other methods for uterine extirpation, it has been thought desirable to report in each month's Journal, for a time at least, the cases of hysterectomy in the exact order in which they have occurred in private practice. Unnecessary details will be omitted, and simply points of importance registered. In the last Journal of the present volume a report will be given of the condition of the patients up to that time.

In the report of the work presented in last month's Journal, the nine cases which had been operated upon up to that time, were described. Nineteen cases have since been operated upon, but as ten of them were treated but very recently, it is too early to tell what the final results will be, and therefore they will not be mentioned until the September issue.

The tenth case of hysterectomy by the new method was as follows:

Case No. 10.—Mrs. S., aged 33, mother of two children, admitted for treatment, July 9th; had suffered intensely from neuralgia for fifteen years, for many years of the eyes and head. About five years ago, while at a sanitarium, electricity was applied to the endometrium by a small electrode, with the result of inducing metritis, salpingitis and ovaritis of the left side, attracting the neuralgia to the pelvic region and confining her to her bed for seven months. A subsequent operation for laceration of the cervix and removal of pockets and papillæ from the rectum, restored her to health, although at the time of the operation pus issued from the uterine cavity. She remained well for a few months, when, after an attack of la grippe her neuralgia in the pelvic region returned with increased severity. The uterus was dilated, curetted and packed repeatedly, one prolapsed ovary was removed, and, finally, by laparotomy, the other ovary was sacrificed, but all to no purpose. Constipation as a result of confinement to the bed, induced a chronic inflammation of the sigmoid, in addition to her other afflictions. Surgeons failed to relieve her, and so did doctors, and so did her efforts to get along without either.

She has suffered from several attacks of sunstroke, and is never able to remain south during the summer time.

When she arrived in Chicago, July 9th, she had again been overcome by the heat and was in a very sensitive and almost critical condition. In the first years of her illness, she had borne the pain patiently without anodynes, but during the last five months previous to her arrival in Chicago, she had been confined to her bed and suffered such agony that her home physician, as a mere matter of humanity, advised her to acquire the morphine habit, which she did; so that on July 9th, she had not only her discouragement with previous failures, a body hypersensitive from long-continued suffering and depressed by the action of excessive heat, but also the habit of taking from three to six grains of morphine hypodermically a day. She was naturally a buoyant woman, and could the pain have been controlled, could herself have easily controlled the morphine habit.

She was placed under an anæsthetic and the uterus removed by the new method. In her previous history all surgical operations were followed by extreme prostration, and she was confined to the bed for many weeks. After the hysterectomy the pinched expression of face which she had worn for many years immediately disappeared, she experienced almost immediate relief from her old aches and pains, and made such a rapid recovery that she was walking about the house in two weeks from the time of the operation.

Her neuralgic condition of the sigmoid still continued to some extent, but she was so much more comfortable that she of her own accord reduced her dose of morphine from three grains a day, which she was taking at the time of the operation, to one-eighth of a grain per day. At the rate her improvement is going on at the present time, in all probability she will abandon the morphine in a few weeks' time. She is now visiting the Fair.

This case has been a good illustration of the importance of removing causes instead of simply fighting effects. It is unsurgical to remove ovaries and fallopian tubes and permit a uterus to remain in situ when everybody who is at all familiar with the present knowledge of these subjects, knows that ovarian and salpingian troubles have their origin in the endometrium.

Her highest temperature after the operation was 100 8–10, and this occured on the day following the operation, at 5 o'clock in the afternoon. Her highest pulse was 114, occurring at 9 o'clock on the day of the operation. She had to be catheterised six days.

Case No. 11.—Mrs. P., aged 36, arrived in Chicago and placed herself under my care June 14th. She was pale, haggard and nerv-

ous, almost to the point of frenzy. She had been a chronic sufferer for many years. Her condition had been diagnosed as sigmoid trouble about a year ago, and been treated by two or three different doctors without success. Some months ago, while at a watering place, her attending physician said that she not only had sigmoid trouble, but also chronic endometritis, and he was anxious to place her under an anæsthetic and curette and pack the uterus; but as she would not consent, he compromised with her by attempting to dilate the uterus at his office, permitting her to return afterwards to her hotel. Metritis and cellulitis followed, and she nearly lost her life.

Upon examination I found the uterus completely imbedded in inflammatory products to such an extent that it was scarcely discernible, and the vault of the vagina was one solid, immovable mass. She was confined to the bed for over a month and measures employed to reduce the inflammation, which were sufficiently successful at the end of that time to enable her to be up and around and indulge in short walks without pain or aggravation of her condition. At the end of this time her menstruation, which had been suppressed for two or three months, reappeared painlessly, and she was so greatly improved that she was pronounced in a fit condition for operative procedure.

On July 25th, she was placed under an anæsthetic and subjected to a thorough examination. The uterus was still adherent, but its outlines could be now well defined. It was high in the pelvis. Upon passing the finger well up into the rectum, a large fluctuating sac of pus was detected on the left side of the body of the uterus as far up as the finger could reach. She had made a special request that the uterus be removed if in my judgment it was deemed justifiable. It had always been a source of trouble to her, and as she had given up the hope of ever having children she desired to be rid of the organ, if it could be accomplished safely.

In the report of 1,000 cases of orificial surgery published in the June number of the JOURNAL OF ORIFICIAL SURGERY, a few cases were recorded in which the orificial work seemed to arouse latent abscess of the ovaries or broad ligaments into activity, and a rupture into the abdominal cavity caused death. To be sure there were but five or six of these cases, which was a small percentage, considering the entire number operated upon, but, nevertheless, in the light of present knowledge the loss of these cases was wholly unnecessary. Determining to take no chances upon the patient's life in this case, especially as the pus cavity was so large and readily diagnosed, hysterectomy was resolved upon.

In hysterectomy by the new method, it is not necessary or desir-

able that the uterine tissues should be in the least wounded. This case, however, was so difficult of access, and the uterus would not descend, when dissected loose as in the other cases operated upon, that I immediately saw that, in case the dissection was carried too far into the areolar tissue so as to wound a large sized blood vessel, it would be extremely difficult to check the hemorrhage. In the effort, therefore, to avoid this danger, the dissection was carried by mistake into the uterine tissue itself, and as this structure was friable from the softening action of the inflammatory process which she had so recently suffered, just above where the neck joins the body in the narrowest part of the organ, a little too much traction being employed by the assistant, the organ broke in two, leaving the fundus still in position. This was an unexpected dilemma. However, it did not take long to decide upon a course of action. The packing which had previously been introduced into the uterine cavity was removed and the remaining part of the uterus was now seized from the inside by an Emmet's double tenaculum. This instrument was supplemented by two other tenacula, introduced into the organ and made to bury deeply in the uterine tissue at right angles to Emmet's instrument. The three tenacula were then passed to the hands of the assistant, and while he was staying the organ the dissection was at last completed.

It was found upon examination that the inflammatory exudation had pushed the peritoneal floor of the pelvis so high, and as the importance of seizing the edge of the peritoneum with T forceps as fast as it was severed, so as to keep it satisfactorily in control, was not yet appreciated, it was impossible, after the completion of the operation, to pass the index finger sufficiently high through the wound to even come in contact with the ovaries, much less ascertain their condition. Inasmuch, however, as she did not have pain during menstruation this procedure was not deemed of consequence in her case.

In making the dissection, a large pus cavity was evacuated, which contained, perhaps, two-thirds of a coffeecupful of thick creamy pus. The dissection in this case had been so extremely difficult, it had been conducted through inflammatory products, the parts had been thoroughly bathed in pus, and it was impossible to bring together the margins of the peritoneum so as to make a satisfactory floor of the pelvis, that I must confess to entertaining a considerable degree of anxiety as to the final results, expecting, in case the operation did not prove fatal, that its success could only be assured after a severe struggle for the woman's life. Imagine, therefore, my surprise as well as delight to record that her recovery has been a surprise to all the nurses

and doctors who have been in any way connected with the case. She never suffered pain after the operation, not even a sensation of soreness. Her highest temperature after the operation was 99 2-10, this occurring at midnight of the day of the operation. Her highest pulse was 112, which occurred at 1:30 the following day. After this time her pulse and temperature quickly subsided to the normal standard, and she has made one of the most brilliant recoveries in this list of remarkable cases; demonstrating again how much the endometrium and the spasmodic action of the uterine tissue upon it has to do with pelvic inflammations, also with general conditions of shock and surgical fever.

Being unable in this case to bring together the edges of the peritoneum, a long plug of cotton, wrapped in antiseptically prepared China silk, was inserted far enough into the wound to enter the abdominal cavity. This was removed after forty-eight hours, when a small piece of gauze, saturated in listerine, full strength, was inserted into the vagina by means of a pair of uterine dressing forceps.

(It has not been deemed advisable to douche the vagina after these operations during the first 5 or 6 days, for fear of carrying septic material into the peritoneal cavity.)

The patient was up and around in two weeks time, and in better health than she had been for many years. She is completely convalescent, and dismissed from surgical care.

Case No. 12.—Mrs. R., aged 37, mother of three children, was a pitiable nervous wreck. She had suffered for many years from many forms of physical disorder without being able to obtain relief. Her head, her stomach, her liver, her back, and, in fact, the majority of her most important organs joined in the general complaint that something was very wrong with her body and ought to be righted.

Upon physical examination she was found to be troubled with hemorrhoids and redundant rectal tissue, also with subinvolution of the uterus, cystic degeneration of the cervix, and large and cystic ovaries. She was placed under an anæsthetic, and an opening made into the peritoneal cavity between the uterus and bladder. Through this opening the ovaries and fallopian tubes were carefully examined and found to be in such a serious state of degeneration that their repair was evidently a matter of impossibility and their immediate removal demanded. As with the absence of ovaries and fallopian tubes she would have no further use for the uterus, and as the uterus was retroflexed, cystic at its lower part, and possessed of a badly demoralized endometrium, it was determined to remove the uterus as well as the ovaries and fallopian tubes. This was done by the process

of hysterectomy, which has already been described, and in illustration of which this series of cases is given. No difficulty whatever was encountered in the operation, and the subsequent history of the case has been so uneventful as to be almost uninteresting, except in the fact that the operation has been marvelously successful in every way.

The highest temperature following this operation was $100\frac{1}{5}$, occurring on August 1st, six days after the operation. Her highest pulse was 88, occurring on July 30th, four days after operation.

This case differed from the others in one respect; that although the temperature was not high at any time, it remained one-half degree above normal for ten days, reaching her normal temperature permanently on August 5th.

As a rule the cases have no fever except for the first one to five days. The rise in the temperature, however, was slight, and as she was not suffering, perhaps it is scarcely worth calling attention to to the fact. Her nervousness is gone, her complexion has cleared, her happiness appears to be restored, and the prospect is certainly flattering that her years of invalidism are at last terminated.

Case No. 13.—Mrs. W., had been such an extreme sufferer from mental depression, pain in the regions of the liver, and nervous prostration for many years without being able to obtain relief, that surgical assistance was called into requisition.

She is forty-eight years of age, and has ceased menstruation. A persistent numbness and heaviness of the arm and leg of one side, with slight tendency to hemicrania suggested a possible threatened stroke of paralysis. She is of medium height, but of very heavy build, weighing in the neighborhood of 180 lbs.

The American operation, and the operation for laceration of the cervix, performed six months previously, had cleared her complexion and improved her general health to such a degree that she was exceedingly grateful for the work; but as the distress in her stomach and the tendency to numbness and inefficiency of one side still persisted, she felt as though something more must yet be done before she could ever be well.

She was placed under an anæsthetic, and an exploratory incision was made in the peritoneal cavity by way of the vagina between the uterus and bladder. Ample excuse was then found for the persistency of her symptoms. Both ovaries were so adherent as to be completely covered by inflammatory exudation, and it was only with extreme difficulty that the adhesions could be broken up and the organs could be liberated from their thralldom. As the removal of the ovaries

was deemed essential to her recovery, the uterus was also removed, the entire work being affected by the new method.

The highest temperature which she has had since the operation was $101\frac{2}{5}$, this occurring on August 2nd, the fifth day after the operation. Her highest pulse was 110, which occurred on July 29th, the day after the operation. Her convalescence has been uneventful and perfectly satisfactory. She looks bright and cheerful for the first time since she came under my professional care.

The pinching of the ovaries by the contracting bands of plastic lymph which inflammatory action had surrounded them with, was undoubtedly an important factor in her case. She required but one dose of morphine, and that was on the afternoon of the day of operation, at which time she was given one-quarter of a grain hypodermically.

Case No. 14.—Mrs. P., aged 49, widow, mother of two children, the oldest of which is twenty-four years of age.

After the birth of the first child, who is now twenty-one, she experienced a severe attack of puerperal fever, followed by mania, from which she subsequently recovered. For many years she has had an enfeebled action of the heart, weak lungs, having had repeated hemorrhages, and been an extreme sufferer from dysmenorrhœa. She had a cough and expectoration of several years' standing; was very pale and anemic. Several physicians had told her that the administration of an anæsthetic in her case would certainly be fatal. Of course this admonition was not heeded, as the rectal bivalve was considered a reliable resuscitator in case of collapse.

She was therefore placed under an anæsthetic and a careful examination made of her condition. Her hemorrhoidal inch was so badly demoralized as to demand the American operation, and she presented a severe bilateral laceration of the cervix. After the uterus was dilated and curetted, the cervix was slit from side to side so as to bring the uterine plugs of cicatricial tissue which were to be removed, well into view. At the bottom of the right wound, after the plugs were removed, there was found to be a muscular tumor about as large as a hickory nut. A subsequent microscopic examination proved this to be a myoma, pure and simple. The end of the cervix was cystic and poorly nourished. It was my judgment, and also that of my chief assistant, Dr. Holbrook, at the time of the operation, that a hysterectomy would be required in order to secure satisfactory results. Desiring, however, to persevere in a conservatism which has been a life-long habit, the tumor was carefully dissected away and the wounds from this and from the removal of the plugs were carefully closed and

an effort made to save the organ. The American operation was then performed and the patient returned to her bed.

She suffered no shock, and yet she did not progress as rapidly as such cases usually do. After remaining in bed for about three weeks she was sufficiently convalescent to enable her to walk about the house. Soon after her convalescence menstruation appeared. This came on, as it had for many years, with great pain and she was again confined to her bed. After the flow ceased she passed into a state of dangerous collapse, characterized by a fluttering and almost imperceptible pulse, cold clammy perspiration, extreme pallor of countenance, and palpitation of the heart so extreme that the quivering of the chest from its tumultuous action could be easily observed from any point of her room. She was evidently dying and would last probably but a few hours, possibly a day or so. She could still speak, although her voice was very feeble. Every effort was made to arouse her from this collapsed condition, but after forty-eight hours of fruitless efforts in this direction, she was told that the end of her life was rapidly approaching and that her only hope lay in the immediate removal of her ovaries and uterus. She seemed astonished at the statement, and asked if an anæsthetic was not dangerous in her condition and if she would be at all likely to survive the operation. She was informed that it would be perfectly safe to place her under an anæsthetic and proceed with the operation, and was promised that if at any time she showed any symptoms of an immediately fatal result the operation would be abandoned, the rectal speculum be called into requisition and her life saved so that she would not die during the operation. She said in answer to the statement that she had come to Chicago in full confidence and trust that the best thing possible would be done for her; that her friends had told her that she would never leave the institution alive; that she placed her only hope for a continued existence in what could now be accomplished, and that although she was disappointed that at this stage of her treatment she was still in such a feeble and dangerous condition, still it was no time to lose confidence in her physician, and that she was therefore ready to abide by his decision. She said that she had two children to live for, and that she was anxious to have her life prolonged as much as possible for their sakes.

The anæsthetic was immediately administered. At this time she was pulseless at the wrist, and her heart's action so irregular that in no part of her body could her pulse be counted. It was certainly the most desperate undertaking that a surgeon could be called upon to assume. She was placed speedily upon the operating table and the

rectal bivalve was at once carefully employed. It affected her respiration quite profoundly, and immediately afterward her pulse became discernible and much steadier, so that its beat could be counted. The operation was then rapidly proceeded with and the uterus and its appendages quickly removed. At the spot where the myoma had been dissected out was a small slough as large as a thumb nail, which was probably exerting a septic influence in the case and was more or less responsible for her collapsed state for the last two or three days. The ovaries were found to be imbedded in inflammatory products and required literally digging out. The fallopian tubes were also removed, the margins of the peritoneum were carefully stitched together, and the wound dressed as in previous cases. The rectum was again dilated and the patient placed in bed.

To the surprise of everybody present her pulse was now beating steadily at the rate of seventy-eight beats per minute. The cold clammy perspiration which covered her body at the beginning of the operation had entirely ceased and she was warm. Her color had wonderfully improved, and her weak voice was stronger. At 4 o'clock in the afternoon of the day of the operation she showed symptoms of a return to her collapsed state as the result of nausea, but as soon as she vomited she immediately rallied, and from that time to the present has progressed steadily and surely toward recovery. She is now, two weeks after the operation, permitted to sit up for the first time.

This case, more than any other, perhaps, of the entire list, demonstrates a very important fact; that the removal of the uterus and ovaries by the new process seems to be entirely devoid of the element of shock which characterizes all other methods. She has had no returns of palpitation of the heart, or other dangerous symptoms; her expression of countenance is wonderfully improved, and she is happy and vivacious. Many wonderful experiences come under the observation of every surgeon, but this one seems to be almost the exception of exceptions. The present prospect is that she will be spared to care for her children for many years to come.

Her highest temperature after the operation was 100 $\frac{4}{10}$, which occurred on the following day. Her pulse at the same time being 114, which was the highest point reached.

Case No. 15.—Mrs. R., aged 57, ten years past the menopause, the mother of several children.

Eight or nine years ago she suffered extremely from rectal fissure. Under an anæsthetic this was dissected out, but instead of healing kindly showed a tendency to malignancy. Unremitting local attention, together with medication, followed faithfully for two years,

healed the wound and apparently cured the case. She had previously been operated upon for laceration of the cervix, which was successful, not only in healing satisfactorily, but in relieving her of certain nervous troubles which had been of many years' duration.

She came to Chicago in December last, again complaining of her rectum, which, upon examination, presented such an excoriated and irritable condition that the American operation was performed upon her. The end of the cervix was also hardened and cystic, and, remembering her tendency toward malignant degeneration, the uterus was thoroughly dilated and curetted, and the cervix amputated. The wounds healed nicely, and she was dischared in an apparently satisfactory condition. A few months later, however, the soreness in the rectum again returned, and her resident physician reported her in a very unsatisfactory state, saying that the margin of the rectum looked ulcerated and extremely irritable, and thought that something should be done more than he seemed able to accomplish.

As she was unable to return to Chicago, it being difficult for her to ride on account of the soreness in the rectum, she was visited at her home in a distant city on the 3rd of August. Upon making a superficial examination of the case before the administration of the anæsthetic, she was informed that her rectum was in a serious condition, and that it was handicapped by the condition of the uterus, which was also in an unsatisfactory state, and that uterine work, possibly of a severe nature, would be required before the rectum could be cured, as these parts exercised such a mutual influence upon each other that one could not be cured without the repair of the other. She replied that she was in the surgeon's hands and was at his disposal. She was placed under an anæsthetic, and upon a more careful examination it was found that a circle of small warty excrescences, ulcerating at their tops, had sprung from the lower border of the mucous membrane around almost the entire circumference of the anus. The parts had healed nicely after the American operation, but the lower margin of the mucous membrane where it was attached to the skin, instead of adapting itself kindly to this new position, first became swollen and irritable, and then gave rise to the excrescences.

Remembering the two years' struggle in the previous history of the case to prevent a cancerous degeneration of a wound in the rectum, it seemed advisable to look carefully into all the sources of irritation which might aggravate and increase the trouble. Upon examining the uterus, although ten years past the menopause, it was found to be extremely congested, nodular around the margin of the membrane which lined the cervix, and presented quite a number of large blue

veins all over its extremity. As her child bearing period had passed and she had no longer use for the organ, and its appearance, to say the least, was extremely suspicious, the family was informed that the removal of the uterus would probably be required before the rectum could be cured; but that this could be done with safety, and that it was the only way to ensure the best results from operative procedure. Her attending physician was present and did not believe me when I assured him that the operation was free from all danger, and that it would call for no more subsequent care than a case of confinement. He opposed the operation and the family refused to permit its performance without the expressed wish of the patient, feeling that my previous conversation with her had not been sufficiently definite to give her a proper impression of my intentions. Consequently she was placed upon her bed and permitted to awaken from the anesthetic. In the course of half an hour she was fully herself again and the situation was presented to her in detail. Without hesitancy she consented to have the operation performed, and she was again placed upon the operating table. The uterus was quickly and successfully removed, without the loss of more than two or three tablespoonfuls of blood. The ovaries were found to be badly degenerated and bound down by old inflammatory adhesions. These were broken up and the ovaries and fallopian tubes removed, the peritoneum closed, and the patient placed in bed.

Her physician in attendance after seeing the operation performed, apologized for his previous skepticism, and said that in his estimation the statement was perfectly correct—that the operation was free from danger, and she would not suffer from any subsequent inconvenience. The subsequent reports from the case have been more than satisfactory. The pinched expression of the face which she had worn for many years immediately disappeared, as did also the tendency to irritability which had been a constant source of annoyance to herself and friends. She has suffered no pain, and but a very slight rise of temperature and pulse after the operation, and required the administration of no medicine whatever, not even a dose of morphine. It is not yet time to report upon the action of the work upon the rectal condition, but this will be mentioned when the other cases are reported later in the year.

Case No. 16.—Mrs. R., aged about 35, had borne children. She suffered from uterine cancer, so far advanced that the upper part of the vagina, cervix and lower part of the body of the uterus were entirely destroyed with the exception of a narrow strip of tissue in front about as broad as the little finger, which still remained intact.

Two days previous to the operation an eminent surgeon had placed her under an anæsthetic and attempted to curette away the cancerous debris. He was soon stopped. however, by dangerous hemorrhage, which he could only control by packing the cancerous cavity with wads of cotton soaked in persulphate of iron. The general condition of the patient was good except that she was weak from the loss of blood and shock occasioned by the curetting.

As it was impossible to attack the uterus from below, on account of the degenerated condition of the margin of the ulcerated surface, and the entire absence of all uterine tissue, an opening was made in front between the body of the uterus and bladder and the fundus dragged downward through the opening by tenacula. The dissection was then begun from above downward, and was accomplished satisfactorily and successfully without excessive hemorrhage. It was impossible to remove the entire cancerous mass, however, and the partition wall between the vagina and rectum was badly involved. In the effort to take away as much as possible of this part of the cancer the rectum was unconsciously perforated. After removing the ovaries and fallopian tubes which were easily taken away, and stitching the margins of the peritoneum—to which they were attached—together so as to close the wound nicely, the wound and margin of the peritoneum were approximated as well as could be done, an opening at the back part still being left which it was impossible to close. The operation was a very severe one and during it the rectal speculum was used two or three times to sustain the patient. She was very weak after it and required restoratives.

The patient had no unfavorable symptoms for about four days, after which time she was taken with a chill and her temperature rose to 104 $\frac{8}{10}$, and her pulse beat at the rate of 140 per minute. The surgeon who was left in charge, comprehending the difficulty, placed her upon the operating table, and with the aid of the speculum opened the wound, which had partially closed, and evacuated a large quantity of offensive discharge. He douched the parts with peroxide of hydrogen, and afterward with antiseptic solutions, and then packed the cavity with iodoform gauze and left her in this condition for several days, after which there was a rapid convalescence. A rectal fissure was formed as a result of the wound in the rectum at the time of the operation, and an operation will be required to remove the remaining cancerous material in the interior wall of the rectum. This can be done by laying open the peritoneum and the wall between the rectum and vagina up to the diseased mass, which can then be dissected out and the wound closed satisfactorily.

It looked for a time as though this would be an exception to the rule of recoveries, but it has not proved such, and the record is still unbroken.

Case No. 17.—Aged 63, mother of eight children, the youngest of which is twenty-one years of age. Her difficulty was neuralgia of the superior maxillary nerve, which had been of eleven years duration, increasing gradually in severity until it was intolerable. All her teeth had been removed, the roof of the mouth perforated and a search made for a satisfactory cause of the pain, which was not found, when the antrum of Highmore was repeatedly packed and drained. When the wound was unpacked the pain remained. An operation was about to be performed for the removal of Meckel's ganglion, when she was examined orificially, and to the surprise of her physician she presented a case of complete procidentia. The uterus and bladder had formed a tumor as large as one's fist and had been dangling between her limbs for twenty-five years; no one had even examined her, as she had suffered no pain in that region, and only when the neuralgia of the face set in did she apply for relief.

As soon as the procidentia was observed, instead of operating upon the jaw, hysterectomy was performed and the vagina shortened so as to restore the bladder to its position. The effect of the operation was almost miraculous. The neuralgia of the superior maxillary nerve was instantaneously relieved. It is now a month since the operation, and she has had only one twinge of pain, and that was at the time of her first passage of the bowels. She now eats solid food for the first time in years, and is perfectly well. She did not even have a degree of fever after the hysterectomy and no pain whatever, not even soreness.

It is needless to say that the operation for the removal of Meckel's ganglion was not performed.

The ovaries were not removed in this case, as they were atrophied and apparently normal.

Case No. 18.—Mrs. F., aged 30, came under treatment August 5th. Her menstrual period began at seventeen years of age, and was inaugurated with great pain. Pain had also marked her subsequent menstruations. She was pale, anemic, had been married for six years but had not borne children. Early in her married life she had once been pregnant, but had suffered a miscarriage at three months. Her flow had always been excessive, gradually increasing in severity until of late fully half of her time had been spent in bed, and it required skillful medical attention at every period to prevent a fatal hemorrhage.

She was placed under an anæsthetic, and the uterus thoroughly dilated and curetted. The curettings from the fundus of the uterus were somewhat suspicious in character, being hard, brittle, and pearl-colored, as though exuberant and prolific cell growths. There was such a large quantity of this material that a further exploration of the case was deemed advisable. The uterus was firmly fixed in its position by fibrous bands, which were the products of previous inflammations.

An opening was made into the peritoneal cavity between the uterus and bladder for purpose of exploration. The entire posterior surface of the uterus, even to the very fundus itself, was so firmly adherent to the rectum that it was very difficult to destroy the adhesions sufficiently to tilt the uterus forward. The ovaries were found completely imbedded in equally obstinate bands of fibrous tissue. The fallopian tubes were likewise badly infiltrated with prolific cell growth, and the entire condition appeared so serious that extirpation of the sexual apparatus was determined upon. This was extremely difficult owing to the fixation of the uterus in an elevated position. While making the exploratory incision between the uterus and bladder a mistake was made, which should be recorded simply as a danger signal to other operators. As the uterus did not come down easily under the dissection, this had to be carried on by the aid of the tenaculum and scissors almost entirely. When the dissection had progressed for some distance up the interior surface of the uterus, a fold of the bladder was seized by the tenaculum and mistaken for the peritoneum and was opened with the scissors. A gush of water, smelling of urine, immediately demonstrated the mistake. The dissection was proceeded with, however, and the uterus, ovaries and fallopian tubes were successfully removed. The opening which had been made into the bladder was then carefully stitched by continuous suture of cat-gut. The peritoneum was then brought down from above and made to cover this wound, being carefully held in this position by sutures, so that whatever leaking might occur from a failure to coapt the margins carefully, would be poured into the vagina rather than into the peritoneal cavity. The margins of the peritoneum were then brought together laterally and carefully stitched. The usual packing of cotton wrapped in silk was introduced into the wound at the top of the vagina. This was surrounded by solid packing of iodoform gauze, and orders given for the urine to be drawn once in two hours. Fortunately the repair of the bladder was successful, and no urine leaked into the vagina. No harm seemed to follow the opening of the bladder, and the patient has made a very rapid and satisfactory convalescence.

The highest temperature which she developed, strange to relate,

after the operation was $100\frac{2}{10}$, which occurred on the third day after the operation, at 5 o'clock in the afternoon. The highest pulse was 118 at 3:30 p. m. on the day of the operation. Her pulse at that time gradually lowered until August 10th, five days after the operation, it reached 80, at which point it has since remained.

The later results in these cases will all be given further on in the year.

E. H. PRATT.